

5258540



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5763-7

Job Sheet 207393



Part No: D5763-7

Job Qty: 10 pcs

Part Name: Pad



Part Weight: 0 lbs

Job Created: 2/25/20

Due Date: 3/6/20

Type: Stock

Status: New

Job Tracking No:

Created By: Jennifer Renwick

Description:

POSITIVE RECALL

EFFECTIVE AUTH

RELEASED

Priority: Medium

Note: URF 2020-525 Was PN: 78634-12 DWG D5763 REV:A IPP REV:A 19.12.19 NEW ISSUE JV VERF:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1	10 pcs	3/6/20	3/6/20	0.17	0.33	Waterjet - Flow		dc 20/02/20
110	QC 2	10 pcs	3/6/20	3/6/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		dc 20/02/20
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		
							QC 2 - 65		

PRIORITY

120	QC 8	10 pcs	3/6/20	0.00 0.00	QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 2 - 76	
					QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
					QC 8 - 76	
					QC 8 - 61	
130	Packaging 3-1 - Stock - B4B	10 pcs	3/6/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	

DAS
40
FEB 26 2020 8:00

mtc

				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
140 QC 21 - SA	10 pcs	3/6/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	
Part Op 100 - 1-Cut as per D5763 DWG. DWG. Rev: <u>A</u> PROG. Rev: <u>A</u> 2-Deburr if necessary Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB 120 - QC8- Inspect parts - second check 130 - Identify as per dwg & Stock Location: _____ 140 - QC21- Final Inspection - Work Order Release					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
M304S11GA	304/316 0.125 Sheet	.1310 sf (.0131 ea)	100-Waterjet - Flow - 1	5242860	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Waterjet - Flow - 1	M304S11GA	0	145	0	
Part Specifications					
Specifications could not be found.					

Plex 2/25/20 1:02 PM Dart.lajeunesse.marie

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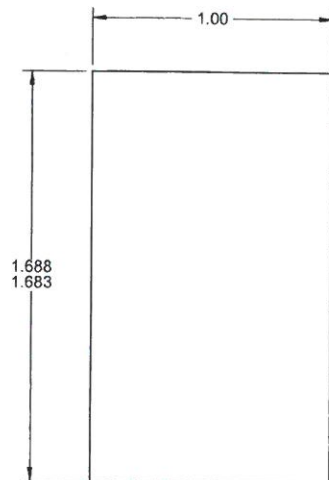
3

2

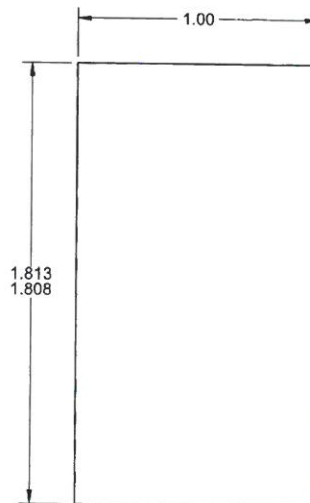
1

0.125
REF0.125
REF

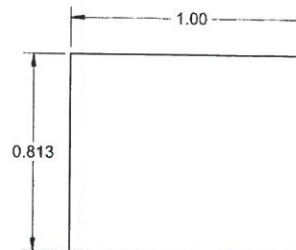
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 207393 MWS
20-02-25

0.125
REF**D5763-5 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-03)

**D5763-7 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-12)

**D5763-9 PAD**

(DERIVED FROM AERO DESIGN P/N 78634-11)

UNDER REVIEW

URF 2020-524 20.02.20 (NO)

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR OR PLATE, 1/8 THICK
PER ASTM A276 OR ASTM A240 OR MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASME SA240
REF DART SPEC M304B OR M304S
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -5: 0.06 lbs
-7: 0.06 lbs
-9: 0.03 lbs

RELEASED

2020 FEB 19

APPROVED

DESIGN	ZF	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	DD	D5763	SHEET 8 OF 10
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	FWD BEAM	NTS
DATE	20.02.19	COPYRIGHT © 2019 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

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1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB045332**



Supplier: ACI001-V
Acier Oue' tte Inc.
935 Boul u Havre
Valleyfie
QC
J6S 5L 2a 1ada
Phone :00 567 4248
Fax: 450 377 5696

Attention: Langevin, Melanie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045332

PO Date: 12/6/19

Due Date: 12/13/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments: quote no. sou0227540

E-MAILED
DEC 06 2019

Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M2024T3S.040			2024-T3 .040 Sheet MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209	Firmed	-	12/13/19	144 sf	0 sf	144 sf	\$6.9811666/sf	\$1,005.29
									144 sf cel			DAS 82 9-89 DEC 11 2019	
2		M6061T6S.188			6061-T6 .188 Sheet MATERIAL: 6061- T6/T62 ALUMINUM SHEET AS PER QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	-	12/13/19	48 sf	0 sf	48 sf	\$12.77916650/sf	\$613.40
									48 sf cel			DAS 82 9-89 DEC 19 2019	



Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB045332



Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3		M6061T6S.080			6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed		12/13/19	192 sf	0 sf	192 sf	\$6.2664583/sf	\$1,203.16
										192 sf 192 sf 192 sf		DAS 82 9-89 DEC 19 2019	
4		M304S11GA			304/316 0.125 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	12/13/19	96 sf	0 sf	96 sf	\$13.329062/sf	\$1,279.59
										96sf 66sf		DAS 82 9-89 DEC 19 2019	
5		M304S14GA			304SS sheet .080 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	-	12/13/19	64 sf	0 sf	64 sf	\$8.366652630/sf	\$535.47
										64 sf 66sf		DAS 82 9-89 DEC 19 2019	



Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB045332



Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6		M304S16GA	D3494		304/316 Sheet .063 MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	12/13/19	128 sf	0 sf	128 sf	\$6.5061562/sf	\$832.79
7		M304S18GA			304/316 .050 Sheet MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	12/13/19	320 sf	0 sf	320 sf	\$5.7099375/sf	\$1,827.18

Grand Total: \$7,296.87

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/6/19 11:14 AM Dart.Lavoie.Chantal

**ACIER OUELLETTE INC.**

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - **MILL TEST****Copy**

CO00183417

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att :

Instruction F-M**Delivery Route** 5**Customer N°**

CLI0001056

Date

2019/12/06

Delivery date**2019/12/13****Your order N°**

POHB045332

Processed by

Josianne Bourdon

Salesman

JOSIANNE BOURDON

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ALU SHEET .040 (18G) 2024-T3 48 (4 X 12) DART FEALD-04041220248 12473 AC32236-SA-11/12 <i>lot 338988B9 heat: 131</i>	81.07	144.00	PI2_\$CLB								
2 ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 AC32233-TH-11/12 <i>lot 16135/01 H: 01/0091979/8</i>	128.88	48.00	PI2_\$CLB								
3 ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 TRANSFERT ST-JEROME LE 11-12 PACKAGING <i>lot: 400871 H: H3600021</i>	164.30	144.00	PI2_\$CLB								
4 SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 PACKAGING <i>Heat: C84X</i>	504.00	96.00	PI2_\$CLB								
5 SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 PACKAGING <i>Heat: LZ25HC10</i>	209.98	64.00	PI2_\$CLB								
6 SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 PACKAGING <i>Heat: 4167</i>	336.00	128.00	PI2_\$CLB								
7 SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425 PACKAGING <i>Heat: C44B</i>	672.00	320.00	PI2_\$CLB								



Invoice

FC00190611

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Sold to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7
Att : Facturation

Customer N° CLI0001056
Date 2019.12.16
Your order N° POHB045332
Salesman JOSIANNE
Carrier OUELLETTE VALLEYFIELD
Credit Term Net 30 Days
Order N° CO00183417

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amount
ALU SHEET .040 (18G) 2024-T3 4B (4 X 12) DART FEALD-0404122024B 12473 3 X 4' X 12' POHB045332 LINE 1 LOT 338988B9 CAST 131 AC32236-SA-11/12	81.07	144.00	PI2_\$CLB	3.00	UN		3.0	335.0967	1 005.29
ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 1 X 4' X 12' POHB045332 LINE 2 LOT 16135/01 HEAT 01/0091979/8 AC32233-TH-11/12	128.88	48.00	PI2_\$CLB	1.00	UN		1.0	613.4000	613.40
ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 3 X 4' X 12' POHB045332 LINE 3 LOT 400871 HEAT H3600021 TRANSFERT ST-JEROME LE 11-12 PACKAGING	164.30	144.00	PI2_\$CLB	3.00	UN		4.0	228.0925	912.37
SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 3 X 4' X 8' POHB045332 LINE 4 HEAT C84X PACKAGING	504.00	96.00	PI2_\$CLB	3.00	UN		3.0	426.5300	1 279.59
SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 2 X 4' X 8' POHB045332 LINE 5 HEAT LZ25HC10 PACKAGING	209.98	64.00	PI2_\$CLB	2.00	UN		2.0	267.7300	535.46
SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 4 X 4' X 8' POHB045332 LINE 6 HEAT 4167 PACKAGING	336.00	128.00	PI2_\$CLB	4.00	UN		4.0	208.1975	832.79
SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425	672.00	320.00	PI2_\$CLB	10.00	UN		10.0	182.7180	1 827.18

LIME 4

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S 11GA
 DATE: DEC 20 2019

PO / BATCH NO.: POM13045332
S242860

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 96 SF
 QUANTITY INSPECTED: 96 SF
 QUANTITY REJECTED: —

THICKNESS ORDERED: .125
 THICKNESS RECEIVED: .125
 SHEET SIZE ORDERED: 4' x 8'
 SHEET SIZE RECEIVED: 4' x 8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	ASTM A240
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	HIT CBY
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>32</u> <u>3-89</u>	SIGNED OFF BY: _____
DATE: <u>DEC 20 2019</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LIME 4

M304S11GA

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET
ANNEALED

SPECIFICATION: MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

DAS
82
9-89

DEC 20 2019

FINISH:

FINISH
UNPOLISHED No. 1
UNPOLISHED No. 2D
UNPOLISHED No. 2B
POLISHED No. 3
POLISHED No. 4
BUFFED No. 6
BUFFED No. 7
BUFFED No. 8

DART M-NUMBER
IDENTIFIER
1P
2D
NONE
3P
4P
6P
7P
8P

PART NUMBER: M304S TT GA #P

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04

ECN 15-122

D	ADDED GAUGES D.7	AJS	15.01.06
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (ZN B5)	MB	12.09.20
B	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. D
CHECKED		M304S	SHEET 1 OF 1
MFG. APPR.		TITLE	SCALE
DE APPR.		304/316 SS SHEET	NTS
DATE	15.01.06	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 526418 1

Customer: 007050 001

Date: 7/25/2019 Page: 1

Steel: 304/304L

Finish: 2B

Corrosion: ASTM A262/15A;180Bend-OK

Your Order: 70546

NAS Order: WN 0111468 02

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED. UNS 30400/30403
ASTM A240/18, A480/18a, A666/15; ASME SA240/17, SA480/17, SA666/17
CHEM ONLY ON FOLLOWING ASTM: A276/17, A479/17, A484/16, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J XMRK; MIL-5059D AMD3(X CRN MEAS); MIL-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; Q2S766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DPA's Compliant

DAS
82
9-89
DEC 20 2019

Product Id	Coil #	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
05C84X AA	05C84X A		.1200	48.0000	4,442 SHEETS	144.00		19	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
C84X	US	.0232	18.1450	.4395	1.8185	.3810	.0826	8.0750	.0320	.0033
SI %										
.2745										

MECHANICAL PROPERTIES

Product Id#	UTS	20C .2% YS	20C ELONG	% Hard	Tail
	KSI	KSI	%-2"	RB	Hard
05C84X AA	F T 93.43	44.50	48.77	85.00	85.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS TARK

7/25/2019

sent: C84X

209099

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____		DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>		DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/>																															
Date : _____		Sequence #: _____		QTY Affected : _____		MRB (QSI042)																													
Description Work Order Deviation				Disposition																															
				Completed By																															
				Lead hand / Supervisor																															
				QC / QA Coordinator																															
Root Cause Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Preservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/>		FAULT CATEGORY <table border="0"><tr><td><input type="checkbox"/> Pressure/Forced</td><td><input type="checkbox"/> Contamination</td><td><input type="checkbox"/> Power Loss/Surge</td><td><input type="checkbox"/> Positioned Wrong</td></tr><tr><td><input type="checkbox"/> Bending</td><td><input type="checkbox"/> Misaligned/off center</td><td><input type="checkbox"/> Folio/Program</td><td><input type="checkbox"/> Outside Tolerance</td></tr><tr><td><input type="checkbox"/> Crushing</td><td><input type="checkbox"/> BOM/Route</td><td><input type="checkbox"/> Grain Direction</td><td><input type="checkbox"/> Drawing</td></tr><tr><td><input type="checkbox"/> Cracks</td><td><input type="checkbox"/> Broken/Damage/Defect</td><td><input type="checkbox"/> Weld</td><td><input type="checkbox"/> Finish</td></tr><tr><td><input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist</td><td><input type="checkbox"/> Incomplete/Unclear Instructions</td><td><input type="checkbox"/> Wrong Stock Pulled</td><td><input type="checkbox"/> Part Lost/Missing</td></tr><tr><td><input type="checkbox"/> Marks/Chatter</td><td><input type="checkbox"/> Drill Holes</td><td><input type="checkbox"/> Out of Sequence</td><td><input type="checkbox"/> Misread</td></tr><tr><td><input type="checkbox"/> Mislabeled</td><td><input type="checkbox"/> Fit/Function</td><td><input type="checkbox"/> Off-set/Set-up</td><td></td></tr></table>						<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Contamination	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Bending	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Tolerance	<input type="checkbox"/> Crushing	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain Direction	<input type="checkbox"/> Drawing	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Weld	<input type="checkbox"/> Finish	<input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist	<input type="checkbox"/> Incomplete/Unclear Instructions	<input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Misread	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Off-set/Set-up	
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